



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,606	02/04/2005	Yoshinobu Imaizumi	1422-0661PUS1	1672
2292 7590 02/13/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER DOUYON, LORNA M				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
02/13/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/523,606

Applicant(s)

IMAIZUMI ET AL.

Examiner

Lorna M. Douyon

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 3, 2007 has been entered.
2. Claims 1-7 are pending. Claims 6-7 are newly added.
3. The rejection of claims 1 and 5 under 35 U.S.C. 103(a) as being unpatentable over France et al. (US Patent No. 6,063,751) is withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 1, 3-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations “detergent particles have a bulk density of 600 g/L or less” (see claims 1 and 3, last two lines, respectively), and “...less than 500 g/L” (see claims 6 and 7, last lines) are not supported in the specification on page 29, lines 19-21 which discloses a bulk density from “150 to 800 g/L, 250 to 600 g/L and 300 to 500 g/L. The added limitations in the claims lack literal basis in the specification as originally filed, see *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984).

Claim Rejections - 35 USC § 102/103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claim 2 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over France et al. (US Patent No. 6,063,751), hereinafter “France”.

France, in Comparative Example IV, teaches a detergent composition comprising 40 wt% sodium C₁₂₋₁₆ alkyl sulfate surfactant, 30 wt% sodium carbonate, 30 wt% sodium tripolyphosphate (STPP), (total water soluble inorganic substance is 60 wt%), and wherein the a mean particle size of the composition is 300 microns (see col. 11, lines 21-61). There is no zeolite in this example. Even though this comparative example is outside the invention of France, a prior art reference must be considered in its

entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. Denied, 469 U.S. 851 (1984). In addition, a known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use, see *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). See MPEP 2141.02, MPEP 2145X.D.I and MPEP 2123. Additionally, "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. Hence, France anticipates the claims.

8. Claims 1-2, 5-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mort, III et al. (US Patent No. 6,258,773), hereinafter "Mort".

Mort teaches a low density agglomerated detergent composition which comprises 15.8 wt% sodium alkylbenzene sulfonate (NaLAS); 48.0 wt% sodium carbonate; 22.7 wt% sodium tripolyphosphate (STPP); 5.5 wt% sodium silicate (total water-soluble solid alkali inorganic substance is 76.2 wt%); and having a bulk density of about 485 g/l and a median particle size of about 360 microns (see Example in col. 11, line 30 to col. 12, line 18). "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and

the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113. Hence, Mort anticipates the claims.

9. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (EP 0,969,082), hereinafter "Kubota".

Kubota teaches a method for preparing detergent particles comprising the steps of (a) preparing a slurry containing a water-insoluble inorganic compound, a water-soluble polymer, and a water-soluble salt, wherein 60% by weight or more of water-soluble components including the water-soluble polymer and the water-soluble salt is dissolved in the slurry; (b) spray-drying the slurry obtained in step (a) to prepare base particles; and (c) adding a surfactant to the base particles obtained in step (b) to support the surfactant (see page 3, lines 26-32; page 12, line 53 to page 13, line 4). In order to further improve the properties and quality of the resulting detergent particles, it is preferable to further add a surface-modifying step subsequent to step (c) (see page 13, lines 6-8). Kubota also teaches a detergent composition comprising the detergent particles in an amount of 50% by weight or more (see page 3, lines 34-35), and a detergent composition having an average particle size of from 150 to 500 μm and a bulk density of 500 g/liter or more (see page 3, lines 36-43). As the water-insoluble inorganic compound, examples include crystalline or amorphous aluminosilicates, silicon dioxide, hydrated silicate compounds, clays and the like (see page 5, lines 53-57), in amounts from 20 to 90% by weight; and the water-soluble salts, which are inorganic salts like alkali metal carbonates are present in amounts from (see page 6, lines 37-43; page 7,

Art Unit: 1796

lines 12-14). Kubota teaches Base Particles 1 comprising 50 wt% zeolite (component a), 20 wt% sodium carbonate, 10 wt% sodium sulfate and 1.5 wt% sodium sulfite (a total of 31.5 wt% water-soluble alkali inorganic substance), having an average particle size of 225 μm (see Table 1 on page 19), which Base Particles 1 were prepared by spray drying (see page 18, lines 1-21). To 100 parts by weight of Base Particles 1 was added 3 parts by weight of palmitic acid (an acid precursor of anionic surfactant), and the resulting mixture was surface coated with 8 parts by weight of crystalline aluminosilicate and the resulting detergent composition has an average particle size of 270 μm (see Table 2, Example 5 on page 21 and page 23, line 56 to page 24, line 10). Kubota, however, fails to specifically disclose detergent particles, or the process of making thereof, wherein the detergent particles comprise zeolite in an amount of 10% by weight or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare detergent particles comprising a water-insoluble inorganic compound (i.e. component a) other than zeolite, such as silicon dioxide, hydrated silicate compounds, and clays because these are other suitable water-insoluble inorganic compounds taught by Kubota on page 5, lines 53-57. Non-preferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278(CCPA 1976); *In re Kohler*, 177 USPQ 399.

10. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddick et al. (US Patent No. 5,573,697), hereinafter "Riddick".

Riddick teaches detergent granules comprising 30.0 wt% LAS (linear alkylbenzene sulfonate), 21.6 wt% STPP and 45.5 wt% sodium carbonate (see Example 9 in col. 7, lines 6-16). The detergent granules preferably have an average particle size of from about 200 microns to about 600 microns, more preferably from about 300 microns to about 500 microns, more preferably still from about 350 microns to about 450 microns (see col. 3, lines 61-65) and a bulk density of greater than about 550 g/l (see col. 1, lines 58-60; col. 3, lines 56-60). Riddick, however, fails to disclose the particle sizes and bulk density of the detergent particles in values within those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 627 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578,16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,456,105 USPQ 233,235 (CCPA 1955).

Response to Arguments

11. Applicants' arguments filed December 3, 2007 have been fully considered but they are not persuasive.

With respect to the rejection based upon France, Applicants argue that France does not use a base particle in order to form a detergent particle, as described in the present invention, wherein the base particles are obtained by spray-drying.

The Examiner respectfully disagrees with the above argument because, as stated in paragraph 7, "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983).

With respect to the obviousness rejection based upon Kubota, Applicants argue that the detergent particles of Kubota have a higher bulk density (see Kubota et al., page 12, lines 11-12) while those of the present invention have a lower bulk density, and that the Examples of Kubota teaches away the use of zeolite in the amount of 10% by weight or less as in the present invention, Example 4 contains 50 wt% zeolite.

The Examiner respectfully disagrees with the above arguments because on page 3, lines 36-43, Kubota teaches a bulk density of 500 g/liter or more which overlaps those recited. As stated above, on page 5, lines 53-57, Kubota teaches water-insoluble inorganic compound (i.e. component a) other than zeolite, such as silicon dioxide, hydrated silicate compounds, and clays. Hence, zeolite need not be used as the water-insoluble inorganic compound. Even though zeolite may be preferred, non-preferred embodiments (i.e., silicon dioxide, hydrated silicate compounds, and clays) can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278(CCPA 1976); *In re Kohler*, 177 USPQ 399. In addition, a reference is not limited to the working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

With respect to the obviousness rejection based upon Riddick, Applicants argue that Riddick discloses a method of dry-neutralizing without spray-drying, and therefore does not teach base particles having a sharp particle distribution, a low bulk density and an excellent dissolubility.

The Examiner respectfully disagrees with the above arguments because the detergent granules of Riddick have an average particle size of from about 200 microns

to about 600 microns, more preferably from about 300 microns to about 500 microns, more preferably still from about 350 microns to about 450 microns (see col. 3, lines 61-65) and a bulk density of greater than about 550 g/l (see col. 1, lines 58-60; col. 3, lines 56-60) which overlaps those recited in the present claims. Even though Riddick does not teach a spray-drying method for making the base particles, the present claims are product-by-process claims, hence, any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making, see *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324. Burden is on applicants to show product differences in product-by-process claims, see *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Best*, 195 USPQ 430 (CCPA 1977); *In re Fessman*, 180 USPQ 324 (CCPA 1974); *In re Brown*, 173 USPQ 685 (CCPA 1972).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M. Douyon/
Primary Examiner
Art Unit 1796